

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member for Environment and Transport
Date:	24 April 2018
Title:	Project Appraisal: Buckskin Flood Alleviation Scheme
Report From:	Director of Economy, Transport and Environment

Contact name: Gloria Kwaw

Tel: 01962 847657

Email: gloria.kwaw@hants.gov.uk

1. Recommendations

- 1.1 That the Executive Member for Environment and Transport approves the Project Appraisal for the Flood Alleviation Scheme in Buckskin, Basingstoke, as set out in this report.
- 1.2 That subject to the confirmation of grant funding, approval is given to procure and spend and enter into necessary contractual arrangements to implement the proposed flood alleviation scheme for Buckskin, Basingstoke, in two phases as set out in this report, at an estimated cost of £6.24 million to be funded from Hampshire County Council's Flood Risk and Coastal Defence Capital Programme, Defra Flood Defence Grant in Aid, Southern Regional Flood and Coastal Committee Local Levy and Basingstoke and Deane Borough Council investment.
- 1.3 That authority to make all the necessary arrangements to implement the scheme, including minor variations to the design or contract, be delegated to the Director of Economy, Transport and Environment.

2. Executive Summary

- 2.1 The purpose of this paper is to seek Executive Member approval to procure, spend and enter into the necessary contractual arrangements to implement the proposed flood alleviation scheme in Buckskin, Basingstoke in two phases with an estimated cost of £6.24 million.
- 2.2 The scheme is to be funded from contributions from Hampshire County Council's Flood Risk and Coastal Defence Capital Programme, Basingstoke and Deane Borough Council resources, Department for Environment, Food and Rural Affairs (DEFRA) Flood Defence Grant in Aid funding (FDGiA) and Thames Regional Flood and Coastal Committee (RFCC) local levy.

- 2.3 The scheme is to be procured in two phases based on the different requirements, constraints and traffic/ pedestrian management needs. Phase 1 will consist of upgrades and enhancement of the capacity of ditches and culverts from Saunders Field, along Churchill Way West up to Worthing Road Roundabout. Phase 2 will consist of ditch works to enhance natural flood storage in Saunders Field, works to the subway near McDonalds, and new lateral drainage to collect and connect rising ground water from between houses in the Buckskin area to a new surface water gravity pipe. The pipe will be installed between the Ridgeway Centre on the Buckskin Estate and the start of the existing winterbourne ditch to the north of Worthing Road Roundabout.

3. Background

- 3.1 In the winter of 2013/14, Buckskin and surrounding areas suffered significant flooding. 88 properties were reported to be at risk of flooding, and 45 properties were flooded during the flood event, 36 of these internally.
- 3.2 In its role as Lead Local Flood Authority, the County Council conducted an investigation and produced a report in accordance with Section 19 of the Flood and Water Management Act 2010. This revealed that the flooding in Buckskin appeared to have been driven by a combination of sources, including ground and surface water flooding exacerbated by fluvial flooding, thereby necessitating a multi agency response.
- 3.3 Subsequent groundwater modelling and further analysis concluded that under a do-nothing scenario 170 properties in the area could have flooded in the 2013/14 event.
- 3.4 In November 2016, approval was given by the Executive Member for Environment and Transport for the approach set out in the Buckskin and Romsey Flood Risk management update report to develop the schemes and work with multi-agency partners to secure contributions subject to technical and financial viability of the proposals.
- 3.5 In September 2017, approval was given by the Executive Member for Environment and Transport for the proposed procurement and delivery strategy for the Buckskin Flood Alleviation Scheme.
- 3.6 It is proposed that the scheme is procured in two phases based on the different requirements, constrains and traffic/ pedestrian management needs. Phase 1 will consist of upgrades and enhancement of the capacity of ditches and culverts from Saunders Field, along Churchill Way West up to Worthing Road Roundabout. Phase 2 will consist of ditch works to enhance natural flood storage in Saunders Field, works to the subway near McDonalds, new lateral drainage to collect and connect rising ground water from between houses in the Buckskin area to a new surface water gravity pipe installed between the Ridgeway Centre on the Buckskin Estate and the

start of the existing winterbourne ditch to the north of Worting Road roundabout.

- 3.7 It is proposed that the County Council procure and appoints a contractor to proceed with Phase 1 in summer 2018, with the aim of completing before Christmas 2018. It is anticipated that Phase 2 will commence in the autumn 2018 and be completed in summer 2019. The works will be undertaken using Hampshire County Council's framework contract for Civil Engineering, Highways and Transportation Infrastructure Works Generation 3 Framework Two 2016-2020 (GEN3 (2)).
- 3.8 On completion, the scheme will provide the following benefits:
- A significant reduction in the risk of flooding to properties in Buckskin;
 - A reduction in the loss of access in amenities due to flooding events;
 - A reduction of costs, distress and disruption associated with the recovery from flooding events;
 - Increased ability of residents to acquire competitive insurance and mortgage packages;
 - Increased ability of residents to sell their properties at market rates; and
 - Enhanced community well-being and resilience.

4. Alternative Options Considered and Rejected

- 4.1 Do-Nothing and Do-Minimum options. The Do-Nothing scenario would mean no measures are put in place to reduce the risk of flooding in Buckskin and no further maintenance is undertaken. This will leave 170 properties at risk of flooding from groundwater.
- 4.2 The Do-Minimum scenario consists of ongoing maintenance and provision / implementation of an emergency response plan similar to that undertaken in 2013/14. Both of these options offer little or no protection to the residents and would not align with the County Council's Strategic Plan (2017-2021) to work with communities to identify local solutions that work best.
- 4.3 Option 4 – Gravity Pipe with Storage. This proposal included the provision of a new gravity pipe from the Buckskin estate to West Ham Park, modification of ditches / culverts to store and convey flood flows, and the provision of new attenuation areas at West Ham Park and Saunders Field. Further analysis has shown that attenuation areas will not improve the level of protection against groundwater flooding in a flood event similar to the 2014 event.

5. Measures of Success

5.1 Measures of success provide an illustration of what success would look like. In an event of similar significance to 2014, it is expected that:

- Rising groundwater will be collected from in-between houses on the estate and channelled through to the new gravity drainage pipe, thus avoiding groundwater ponding and flooding on the estate;
- Residents will continue to have access to amenities in the area;
- Businesses will continue to operate, avoiding impact on sales; and
- Road networks and transport links will continue to be accessible to residents.

6. Finance

6.1 A business case seeking £1.75 million FDGiA funding of the total project cost of £6.24 million has been submitted to the Environment Agency's National Project Assurance Service. The proposal has been accepted as viable and availability of the funding has been confirmed.

6.2 The Thames Regional Flood and Coastal Committee (RFCC) has allocated Local Levy to the Buckskin Flood Alleviation Scheme. This contribution, along with partnership contributions from Hampshire County Council, Basingstoke and Deane Borough Council, and FDGiA, enables the total estimated project cost of £6.24 million to be met.

The table below reflects the final position with respect to partnership contributions.

<u>Estimates</u>	<u>£'000 Total</u>	<u>% of total</u>	<u>Fund Available*</u>	<u>£'000</u>
Design Fee	700	11	Flood Defence Grant in Aid	1750
Client Fee	120	2	RFCC Local Levy	2200
Support Services	126	2	Hampshire County Council	2040
Works	5294	85	Basingstoke and Deane Borough Council	250
Land	-	-		
Total	6240	100	Total	6240

<u>Revenue Implications</u>	<u>£'000</u>	<u>% Variation to Committee's budget</u>
Net increase in current expenditure	5	0.004
Capital Charge	600	0.380

7. Programme

7.1 Indicative programme for Phase 1

Task	Start	Finish
Design	10/17	03/18
Contract	01/18	04/18
Project appraisal	03/18	04/18
Tender issue to award	04/18	06/18
Mobilisation	07/18	07/18
Works	07/18	11/18
Maintenance	11/18	10/19

7.2 The development of Phase 2 will progress in parallel to the implementation of Phase 1 with the aim of starting construction in autumn 2018 and completing in summer 2019.

8. Scheme Details

8.1 The aim of the scheme is to increase hydraulic capacity of the surface water and highways drainage to facilitate the flow through of floodwater from the Buckskin estate towards the River Loddon without increasing the risk to downstream communities in an event similar to the 2014 severe weather event. This will be achieved by using laterals to gather rising ground water from between the houses on the Buckskin estate and connecting to a new gravity drainage pipe, which will be connected to the ditch network at West Ham roundabout.

8.2 Ditches and culverts between West Ham, along Churchill Way West up to Saunders Field will be re-profiled and replaced as required to increase capacity to hold floodwater and allow for a steady flow through at a rate that will not cause problems downstream.

9. Departures from Standards

9.1 None.

10. Community Engagement

- 10.1 A project sponsoring group including elected members for the County Council, Basingstoke and Deane Borough Council, and local parish councils has been fully involved in the development of the scheme, as has the Multi-Agency Group, Flood Action Group and residents. The Multi-Agency Group is coordinated by the County Council in its role as Lead local Flood Authority and has representatives from several risk management authorities including Basingstoke and Deane Borough Council, the Environment Agency, Thames Water, South East Water, Sovereign housing and SSE plc.
- 10.2 The project sponsoring group and the multi-agency group, together with the Flood Action Group, meet on a quarterly basis to review and comment on the development of the scheme. The multi-agency meeting is open to residents who use this opportunity to raise local issues that might affect the delivery of the scheme. Local businesses are also updated on a regular basis, and will be consulted on traffic management aspects.
- 10.3 In addition, continuing community engagement is being achieved through a dedicated scheme webpage on the County Council's web site, a questionnaire for local information to residents and businesses, drop in sessions, and also press releases.

11. Statutory Procedures

- 11.1 The delivery of Phase 1 of the scheme will require Ordinary Watercourse Consent related to changes to the ditches. Temporary Traffic Regulation Orders will also be required to facilitate construction along the Highways. Phase 2 will require Flood Risk Activities Environmental Permits to allow outflow from Saunders Field, which will be within 8 meters of the culvert on the River Loddon. No planning application is required as the works will be undertaken under permitted development.

12. Land Requirements

- 12.1 There are no additional, non highway land requirements for Phase 1 works along the road between West Ham Roundabout and Saunders Field. In Phase 2, Basingstoke and Deane Borough Council has permitted Saunders Field to be used to help reduce flood risk in the area. Easements will need to be secured upon, over, and under land that is neither within the County's ownership nor subject to highway rights.

13. Maintenance Implications

- 13.1 The existing Highway drainage is maintained by Hampshire County Council as the Local Highway Authority. It has been agreed that on completion, the scheme will be designated a County Council highways asset and maintained accordingly. Basingstoke and Deane Borough Council, which owns Saunders Field, will retain maintenance of it.

- 13.2 New drainage pipes and gullies are to be kept separate from private networks which will continue to be maintained by their owners. Landowners will not be allowed to connect to the County Council's highway asset in future.
- 13.3 The design has been undertaken with future maintenance in mind and has involved discussions with Highways Asset Management to reduce future revenue burden to a minimum.

CORPORATE OR LEGAL INFORMATION:**Links to the Strategic Plan**

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	no

Other Significant Links

Links to previous Member decisions:	
<u>Title</u> Flood Risk and Coastal Defence Programme - Priorities	<u>Date</u> September 2016
Buckskin and Romsey Flood Risk Management	November 2016
Buckskin Flood Alleviation Scheme	September 2017
Direct links to specific legislation or Government Directives	
<u>Title</u> Flood and Water Management Act 2010	<u>Date</u> 2010

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

DocumentLocation

None

IMPACT ASSESSMENTS:

1. Equality Duty

1.1. The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

1.2. Equalities Impact Assessment:

The development of the scheme will have no impact on specific groups with protected characteristics. The scheme when in place will offer all residents more protection from flooding, and reduce the cost, distress and disruption associated with recovery from flooding.

2. Impact on Crime and Disorder:

2.1. The development of the scheme has no impact on Crime and Disorder. The scheme when in place will reduce the chances of crime and disorder which could occur during flooding events.

3. Climate Change:

a) How does what is being proposed impact on our carbon footprint / energy consumption?

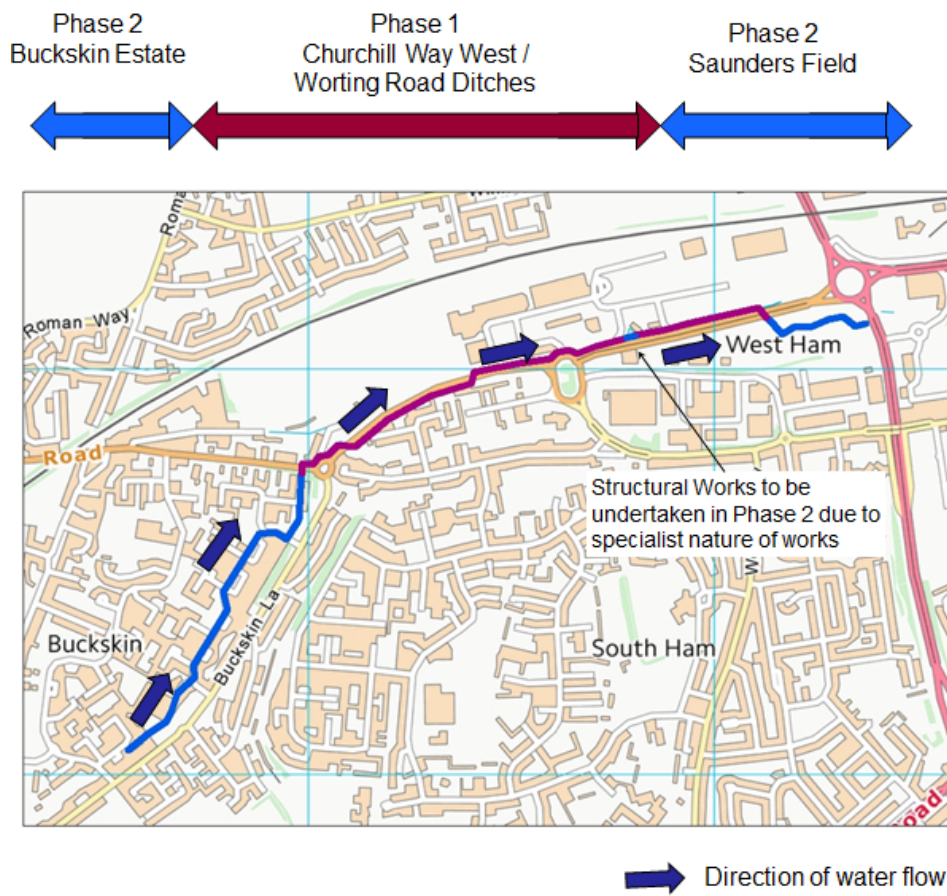
Putting effective schemes in place would reduce the amount of energy required to alleviate flooding emergencies through measures such as

pumping of water, and reduce the resources needed for recovery after an event.

- b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

The severity and frequency of extreme weather events that cause flooding is linked to the changing climate. The design and capacity of the measures being proposed will take into consideration climate change allowances so that they are fit for the future.

Diagram 1: Buckskin Flood Alleviation Scheme Phase 1 and 2



For more information about the scheme design please visit:
<https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/strategies/scheme-buckskin>